

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

F A C T S H E E T

(pursuant to NAC 445A.236)

Permittee Name: Desert Utilities Inc.
2340 East Calvada Boulevard, Suite C
Pahrump, Nye, Nevada 89048

Permit Number: NEV91044

Permitted Unit: Desert Utilities Wastewater Treatment Plant
(WWTP) #1

Location: The Desert Utilities WWTP #1 is a Marwood package plant located 800 W. Simkins Road, in Pahrump, Nye County, Nevada in Section 21, Township 19S., Range 53E. MDB&M. Latitude: 36°16'43"N, Longitude: 116°01'54"W.

Description of Discharge:

The applicant is requesting renewal of permit No. NEV91044 for the utility. Upgrades to the existing wastewater treatment facility, which is designed to treat 0.175 MGD of domestic sewage, will be completed in phases to match growth demands, subject to Division review and approval and additional fees to modify the permit. The Phase I expansion is planned for a flow of 0.350 MGD, Phase II for a flow of 0.525 MGD, and Phase III for a flow of 0.700 MGD. The existing plant serves the greater area of the Desert Trails Subdivision in northern Pahrump. The original 0.010 MGD Marwood plant began operation in April 1996 and is available for sludge digestion and storage, this plant was replaced by the much larger present 0.175 MGD Marwood facility in late 2000. The Marwood facility is an extended aeration plant designed to provide secondary treated, denitrified effluent, with groundwater disposal via rapid infiltration basins (RIBS)(Outfall 001). Some limited onsite irrigation reuse is authorized for windbreak vegetation, (Outfall 002). Monitoring and sampling are required to determine any adverse effects on the groundwater.

Flow

The permitted 30-Day average flow for the facility is 0.175 MGD, with planned upgrades to increase flows in Phase I to 0.350 MGD, and future flows in Phase II to 0.525 MGD, and Phase III at a design flow of 0.700 MGD. Phases I through III flows will become in effect after all plans for each phase are reviewed and approved by the Division, and appropriate fees are submitted allowing flow increases during the next 5-year permit period without reopening the permit.

Effluent Limitations

<u>PARAMETERS</u>	<u>EFFLUENT DISCHARGE LIMITATIONS</u>		<u>MONITORING REQUIREMENTS</u>	
	30 Day Ave.	Daily Max.	Measurement Frequency	Sample Type
Flow MGD	0.175	0.175	Continuous	Flow Meter
Phase I Flow: MGD**	0.350	0.350	Continuous	Flow Meter
Phase II Flow: MGD**	0.525	0.525	Continuous	Flow Meter
Phase III Flow: MGD**	0.700	0.700	Continuous	Flow Meter
BOD₅: influent effluent ***	M & R 30 mg/L	M & R 45 mg/L	Monthly Monthly	Discrete Composite
Total Suspended Solids: (TSS) influent effluent ***	M & R 30 mg/L	M & R 45 mg/L	Monthly Monthly	Discrete Composite
Nitrate as N: mg/L	Monitor and Report		Quarterly	Discrete
Total Nitrogen as N:	10 mg/L		Quarterly	Discrete
pH:	Between 6.0 and 9.0 SU		Quarterly	Discrete
Fecal Coliform:* Outfall 002 only	23/100 ml CFU/MPN	240/100 ml CFU/MPN	Quarterly	Discrete
Flow: Outfall 002 *	Monitor and Report		Quarterly	Calculate

*** report only when reuse is occurring. Any discharge to 002 shall be reported on a separate DMR sheet**

**** Subject to Division (technical services) review and approval, and submission of appropriate application fee for each increase in flow.**

*****BOD and TSS limits to be reduced to 10 mg/L upon initiation of Phase II operations.**

MGD = million gallons per day; ml = milliliters; mg/L = milligrams per liter; CFU = colony forming units; MPN = most probable number

Receiving Water Characteristics

Depth to groundwater near the plant site is approximately 74 feet below ground surface and the groundwater is potable.

Groundwater samples are collected and analyzed quarterly from three monitoring wells for Nitrate as N, Total Nitrogen as N,

Chlorides, Total Dissolved Solids, depth to groundwater and groundwater elevation. Results of sampling in the most recent yearly sampling have resulted in Total Nitrogen as N in the three wells of <1 mg/L to one result of 2.6 mg/L.

Groundwater Monitoring

MONITORING WELLS #1,2,3

PARAMETERS

Frequency

TOTAL DISSOLVED SOLIDS:	Monitor and Report	Quarterly
NITRATE as N:	Monitor and Report	Quarterly
TOTAL NITROGEN as N:	10 mg/L	Quarterly
CHLORIDE:	Monitor and Report	Quarterly
GROUNDWATER ELEVATION:	Monitor and Report	Quarterly
DEPTH TO GROUNDWATER:	Monitor and Report	Quarterly

Procedures for Public Comment:

The Notice of the Division's intent to reissue a permit authorizing the facility to discharge to the groundwater of the State of Nevada subject to the conditions contained within the permit, is being sent to the **Las Vegas Review Journal** and **Pahrump Valley Times** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of the public notice, by July 14, 2006. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons.

The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Schedule of Compliance:

a.)The Permittee shall achieve compliance with the effluent limitations upon issuance of the permit. The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the schedule of compliance.

b.) A Revised Operations and Maintenance (O & M) Manual shall be submitted not later than December 30, 2006. It shall update the Sludge Management Plan, and the Groundwater Monitoring Plan, if any changes have occurred, and contain a brief Effluent Management Plan (EMP) for the onsite reuse. At the initiation of each Phase (I,II, and III) revisions shall be made to the O & M Manual to update all operations and any changes that are to be implemented for that phase.

c.) Plans and specification for each Phase Upgrade shall be submitted to the Division for review and approval prior to construction. All plans shall be wet stamped by a Registered Nevada Professional Engineer in accordance with NAC 625.611 and NRS. 625.565. Each Phase expansion shall include the appropriate application fee for the increase in flow, prior to the start of construction. Updates to the O & M for each new facility phase shall be submitted within 60 days of the startup of the new plant expansion (Phase).

d). A letter of Certification wet-stamped by a Nevada Registered Professional Engineer stating that all elements of each wastewater treatment plant expansion have been constructed in accordance with Division approved plans, shall be submitted to the Division prior to operation of each new completed expansion Phase..

e). The Permittee shall notify NDEP within 14 days after initiation of construction activities for each expansion Phase, and shall notify NDEP within 14 days of operation of each newly completed expansion phase.

Rationale For Permit Requirements

Effluent monitoring is required to assess the level of treatment being provided and to determine when design capacity is being approached for each phase. Effluent limits are required to ensure wastewater treatment to protect the groundwater and human health and the environment.

Groundwater monitoring is required to ensure that operations of the facility do not degrade groundwaters of the State.

Proposed Determination

The Division has made the tentative determination to reissue the proposed permit for a five (5) year period.

Prepared by: Icyl C. Mulligan
April 2006
Revised May 2006